

October 6, 1967

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Dear Gene:

Through the kindness of Dr. Martin Cummings, I have seen the monumental volume which has been prepared on the work of Prof. Henrique da Rocha Lima, devoted mostly to his studies on typhus fever.

My attention has been directed particularly to the notes on the scientific life of Rocha Lima, which is presented in Portuguese, English, and German. For convenience, I shall refer to the English version and specifically to the following sentence on page 568:

"Much later, during the 1928 epidemic of yellow fever in Rio, that anatomo-clinic concept as based on Rocha Lima's findings received at last full confirmation through the careful clinical observations made by Sinval Lins and also served to establish the systematic research of such lesions as a routine procedure to clarify the diagnosis post-mortem through the use of Décio Parreiras' 'viscerotome'."

For your information and for whatever use you may care to make of it, I would have you know that I have recently gone over the documentation regarding the development of the viscerotome and viscerotomy in Brazil in connection with the review of a paper submitted through Prof. J. Rodrigues da Silva to Dr. Robert Watson for publication in The American Journal of Tropical Medicine and Hygiene.

The timing of the development of viscerotomy is essentially as follows:

1. (I have not had an opportunity to consult Rocha Lima's 1921 publication, "Da importancia pratica das lesões do figado na febre amarella." Rev. Med. de Hamburgo, Anno 2, p. 336.)

2. In April 1928, Dr. M. E. Connor of the Rockefeller Foundation authorized the routine collection of liver tissue from the bodies of children and young adults dying at Estancia, Sergipe, to determine the presence

Dr. Eugene P. Campbell

October 6, 1967

or absence of yellow fever. (This initiative did not progress, apparently because of the to-do caused by the invasion of Rio de Janeiro by yellow fever which was recognized the following month.)

3. In 1928, W. H. Hoffmann, of Cuba, advocated, in papers in Spanish, and English, the collection of pathological material for epidemiological studies of yellow fever.

4. In April 1930, the Yellow Fever Service of the Rockefeller Foundation in north Brazil, in Belém, in Natal, and in Mossoró made arrangements for the systematic collection of liver tissue for the discovery of yellow fever.

5. On June 10, on a visit to the Yellow Fever Service in Niteroy with Dr. Alcides Lintz, Dr. Decio Parreiras, and Dr. Alvaro de Andrade, I learned of the routine collection of pathological material in suspect yellow fever areas in the State of Rio de Janeiro. (Apparently the work in the State of Rio and in the north began at approximately the same time, entirely independently the one of the other. To the Yellow Fever Service in the State of Rio de Janeiro goes the credit for the first successful collection of liver tissue with non-medical personnel at points away from a State capital.)

6. On June 26, arrangements were made for Dr. E. R. Rickard to attempt the collection of liver tissue from the Municipio of Nazareth in Pernambuco through the method used in the State of Rio, namely, by arming the registrars with scalpel and scissors and making them responsible for collecting liver sections from indicated cases. Dr. Rickard was loath to have laymen running the risk of infection in this manner, and put himself to devising an instrument for the removal of liver tissue.

7. On July 10, Dr. Rickard showed me the first instrument made after his design. This instrument was in almost final form, receiving only one minor modification up to the present time.

8. Since Lintz, Andrade, Parreiras, and I had discussed the need for such an instrument on June 10, I took pains to advise Dr. Decio of Rickard's instrument on July 22.

9. Early in August application for a Federal patent was made for the Rickard instrument in the name of J. Tomaz Alves. This patent was never completed, its purpose being mainly to prevent the patenting of any rival instrument.

10. On August 1, Dr. Decio Parreiras ordered an instrument according to a different design from Lutz, Ferrando, and Company. This instrument was similar to the Rickard design in that it consisted of but two pieces: a basic framework and a movable blade. The Parreiras instrument was, I believe, delivered some time in September; it was among the effects of the

Dr. Eugene P. Campbell

October 6, 1967

Yellow Fever Service of the State of Rio de Janeiro when this was amalgamated with the Cooperative Yellow Fever Service on the first of December 1930.

11. The Parreiras instrument was tried out extensively by the Viscerotomy Section of the Cooperative Yellow Fever Service, which reported it completely unsuitable for the intended purpose. It was eventually relegated to the museum of the Service. So far as I know, Dr. Parreiras's instrument was never put in production nor used except as a demonstration of how not to make a viscerotomy.

12. The term "viscerotome" was suggested by Dr. Mario Bião on August 26, 1930 to designate the Rickard instrument. (This was before the Parreiras model was out of the shop.)

13. The Rickard viscerotome has been manufactured in the thousands in South America and has been duplicated in London and in Paris. The term "viscerotome" has been used in the description of the Rickard instrument and "viscerotomy" to designate its use in the collection of liver tissue.

14. Decio Parreiras began about 1938, after Dr. Rickard had left Brazil, to claim priority. I took no written action at the time since the documentation was clear; you might see the Revista de Hygiene e Saúde Pública, Anno V, No. 1, January 1931, "Yellow Fever Service in North Brazil from January 1 to August 31, 1930," for the original publication. (I have from the beginning in this and in other publications credited the Yellow Fever Service of the State of Rio de Janeiro with the first collection of liver sections from interior points away from a State capital. I have never credited the Parreiras instrument with any part in the development of the Rickard instrument, nor in the method that was finally used in the collection of liver tissue. (You might see the American Journal of Hygiene, Vol. 19, No. 3, p. 544-546, May 1934, and the Revista de Hygiene e Saúde Pública, Vol. 8, Nos. 2 and 3, February and March 1934.)

Dr. Rickard has been dead since 1950 or 1951. Even so, I do not like to see his work credited to another in the country where he did so much to promote the field work of the yellow fever program, just at a moment when viscerotomy is once more becoming important because of the reinfestation with Aedes aegypti.

For your further information, I would point out that Bob Watson has furnished much of the information I have listed here to Dr. J. Rodrigues da Silva.

Sincerely yours,